SEMICONDUCTOR DEVICE AND ... 3/2/04
Akito Hara
Greer, Burns & Crain, Ltd. (Patrick Burns)
Ref. No. 1117.69877
Sheet 1 of 15 (312) 360 0080

FIG. 1A

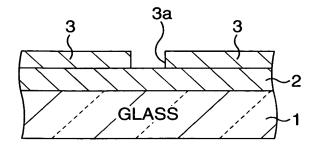


FIG. 1B

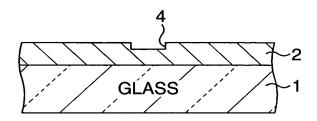


FIG. 1C

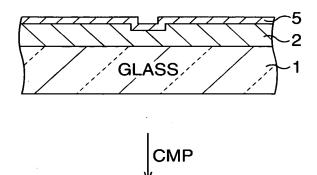
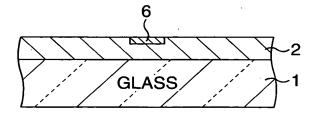


FIG. 1D



SEMICONDUCTOR DEVICE AND ... 3/2/04
Akito Hara
Greer, Burns & Crain, Ltd. (Patrick Burns)
Ref. No. 1117.69877
Sheet 2 of 15 (312) 360 0080

FIG. 2A

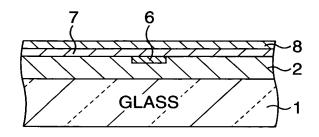


FIG. 2B

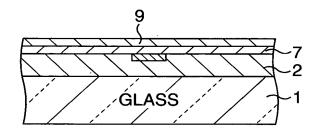


FIG. 2C

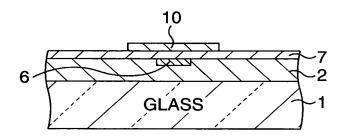
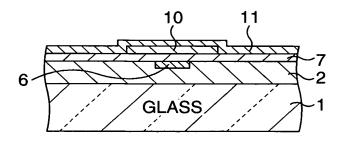


FIG. 2D



SEMICONDUCTOR DEVICE AND ... 3/2/04
Akito Hara
Greer, Burns & Crain, Ltd. (Patrick Burns)
Ref. No. 1117.69877
Sheet 3 of 15 (312) 360 0080

FIG. 3A

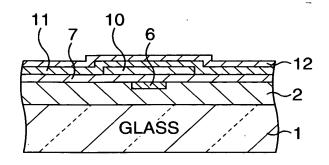


FIG. 3B

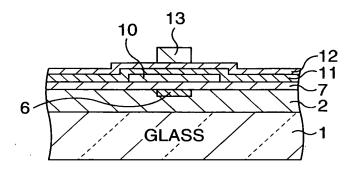


FIG. 3C

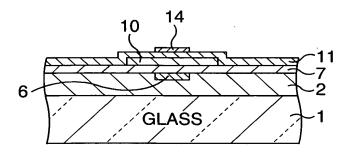
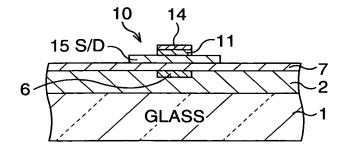


FIG. 3D

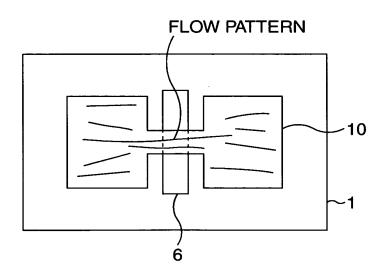


SEMICONDUCTOR DEVICE AND ... 3/2/04
Akito Hara
Greer, Burns & Crain, Ltd. (Patrick Burns)
Ref. No. 1117.69877
Sheet 4 of 15 (312) 360 0080

FIG. 4



FIG. 5



SEMICONDUCTOR DEVICE AND ... 3/2/04
Akito Hara
Greer, Burns & Crain, Ltd. (Patrick Burns)
Ref. No. 1117.69877
Sheet 5 of 15 (312) 360 0080

FIG. 6A

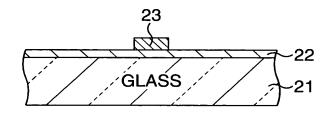


FIG. 6B

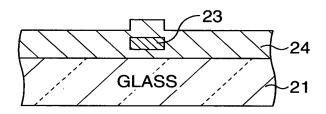


FIG. 6C

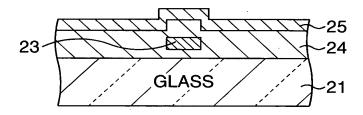
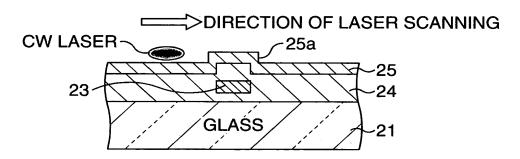


FIG. 6D



SEMICONDUCTOR DEVICE AND ... 3/2/04
Akito Hara
Greer, Burns & Crain, Ltd. (Patrick Burns)
Ref. No. 1117.69877
Sheet 6 of 15 (312) 360 0080

FIG. 7A

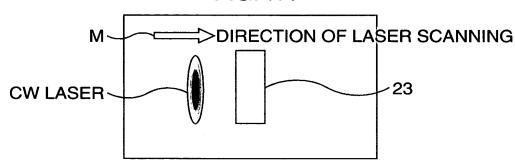


FIG. 7B

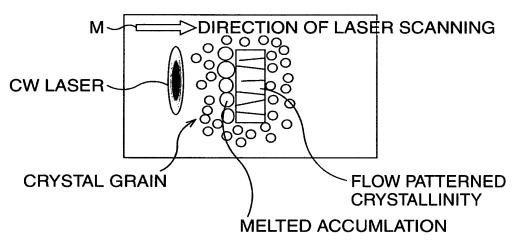


FIG. 7C

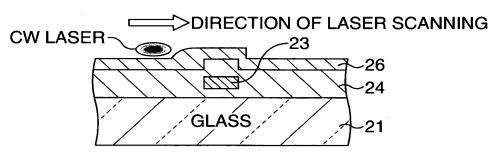
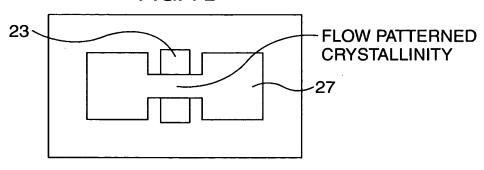


FIG. 7D



SEMICONDUCTOR DEVICE AND ... 3/2/04
Akito Hara
Greer, Burns & Crain, Ltd. (Patrick Burns)
Ref. No. 1117.69877
Sheet 7 of 15 (312) 360 0080

FIG. 8A

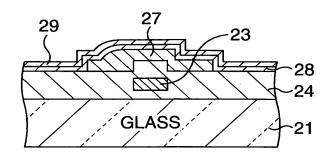


FIG. 8B

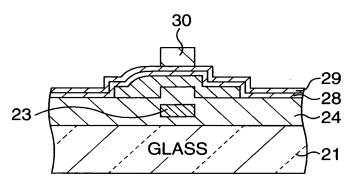


FIG. 8C

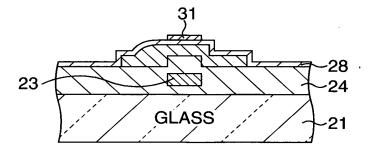
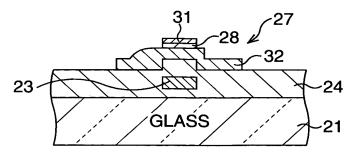


FIG. 8D



SEMICONDUCTOR DEVICE AND ... 3/2/04
Akito Hara
Greer, Burns & Crain, Ltd. (Patrick Burns)
Ref. No. 1117.69877
Sheet 8 of 15 (312) 360 0080

FIG. 9A

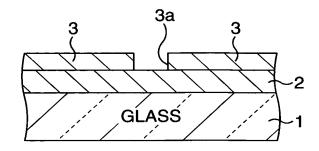


FIG. 9B

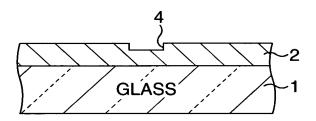


FIG. 9C

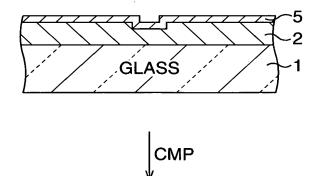


FIG. 9D

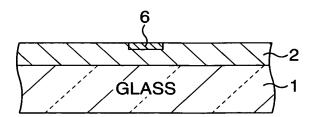


FIG. 10A

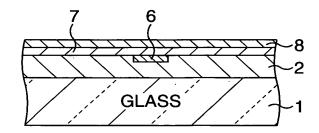


FIG. 10B

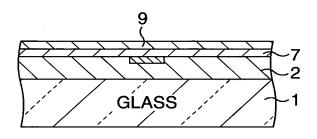


FIG. 10C

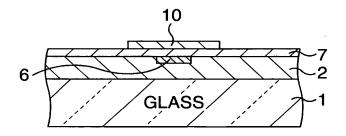
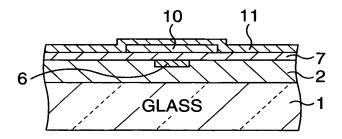


FIG. 10D



SEMICONDUCTOR DEVICE AND ... 3/2/04
Akito Hara
Greer, Burns & Crain, Ltd. (Patrick Burns)
Ref. No. 1117.69877
Sheet 10 of 15 (312) 360 0080

FIG. 11A

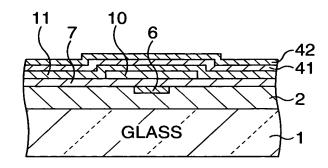


FIG. 11B

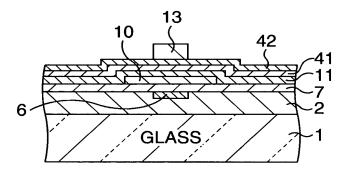


FIG. 11C

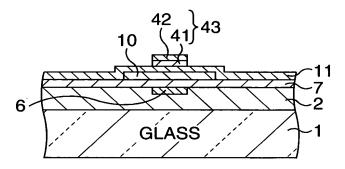
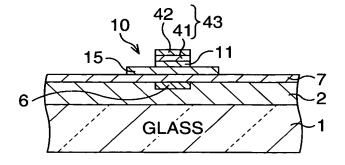


FIG. 11D



SEMICONDUCTOR DEVICE AND ... 3/2/04
Akito Hara
Greer, Burns & Crain, Ltd. (Patrick Burns)
Ref. No. 1117.69877
Sheet 11 of 15 (312) 360 0080

FIG. 12A

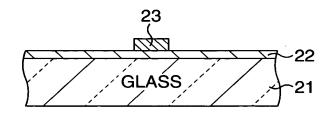


FIG. 12B

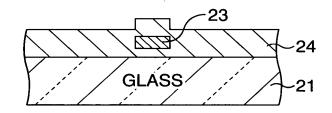


FIG. 12C

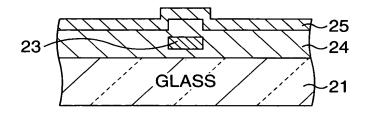
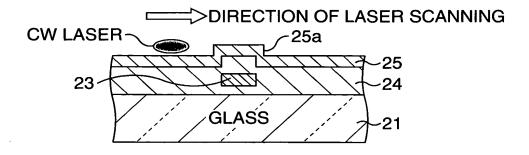


FIG. 12D



SEMICONDUCTOR DEVICE AND ... 3/2/04
Akito Hara
Greer, Burns & Crain, Ltd. (Patrick Burns)
Ref. No. 1117.69877
Sheet 12 of 15 (312) 360 0080

FIG. 13A

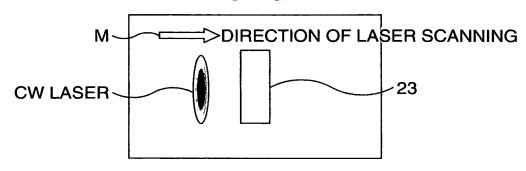


FIG. 13B

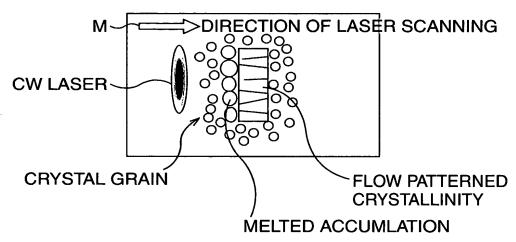


FIG. 13C

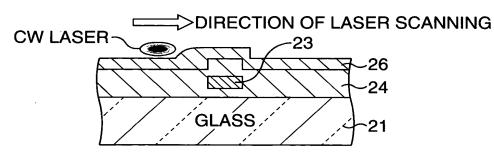
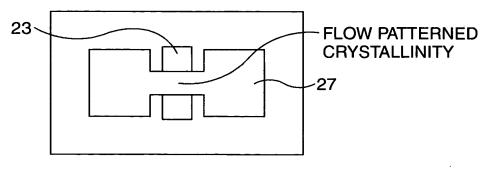


FIG. 13D



SEMICONDUCTOR DEVICE AND ... 3/2/04
Akito Hara
Greer, Burns & Crain, Ltd. (Patrick Burns)
Ref. No. 1117.69877
Sheet 13 of 15 (312) 360 0080

FIG. 14A

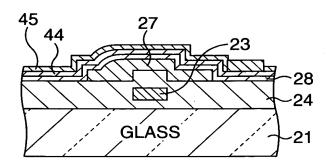


FIG. 14B

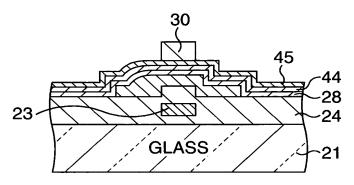


FIG. 14C

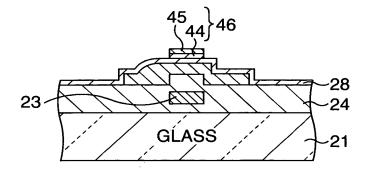
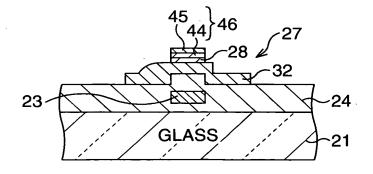
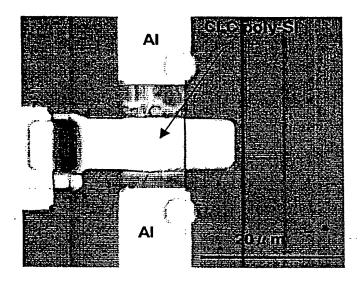


FIG. 14D



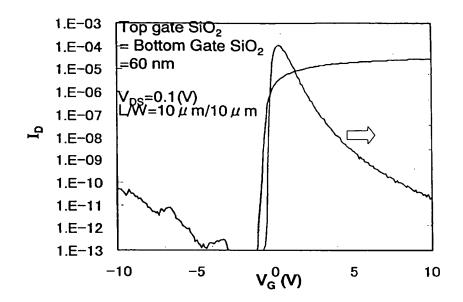
SEMICONDUCTOR DEVICE AND ... 3/2/04
Akito Hara
Greer, Burns & Crain, Ltd. (Patrick Burns)
Ref. No. 1117.69877
Sheet 14 of 15 (312) 360 0080

FIG. 15



SEMICONDUCTOR DEVICE AND ... 3/2/04
Akito Hara
Greer, Burns & Crain, Ltd. (Patrick Burns)
Ref. No. 1117.69877
Sheet 15 of 15 (312) 360 0080

FIG. 16



S-value	99mV/dec
V <sub>th</sub>	-0.73 (V)